WO 2005/003539 PCT/FR2004/001464

12

CLAIMS

- control of a method for motorization system comprising a diesel engine (1), an air-intake circuit (11, 13, 14) and an exhaust circuit (16, 3, 4) for exhaust gas originating from the engine, the intake circuit being provided with adjusting means (22, 23) for controlling the flow (D) of air entering the engine (1) and the exhaust circuit being provided with a nitrogen oxides trap (3) for storage of the nitrogen oxides contained in the exhaust gases, according to which method a regeneration mode of operation takes place in order to regenerate the nitrogen oxides trap (3) by supplying reducing exhaust gases, the method being characterized in that an index value of air flow corresponding to the operating point of the engine is determined during the regeneration mode, the adjusting means (22, 23) are instructed to obtain an air flow (D) close to the index value, and a primary (Qp) and secondary (Qs) injection of fuel are performed, the secondary injection (Qs) being performed during an expansion phase and being adapted so as to maintain the exhaust gases in the reducing state.
- 2. A method according to claim 1, wherein, when the motorization system is provided with an accessory (4) that generates a variable back-pressure (CPE) in the exhaust circuit, the air-flow index value is preferably incremented together with the said exhaust back-pressure (CPE).

WO 2005/003539 PCT/FR2004/001464

13

- 3. A method according to claim 2, wherein the accessory that generates a variable back-pressure (CPE) is a particle filter (4), the air-flow index value being corrected by a factor that is a function of the operating point and of the degree of loading of the particle filter (4).
- 4. A method according to claim 3, wherein the degree of loading of the particle filter (4) is evaluated by the exhaustgas flow passing through it and by the pressure difference (DP) between the inlet and outlet.
- 5. A method according to claim 3, wherein the degree of loading of the particle filter (4) is evaluated by measuring the pressure upstream from the particle filter (4) relative to the exhaust-gas flow.
- 6. A motorization system implementing the method of one of claims 1 to 5.